Claim 6 (amended). The process according to claim 1, wherein the etching gas composition contains additives for improving etching gas properties in the dry etching process.

Claim 7 (amended). The process according to claim 1, which comprises using a photoresist layer as an etching mask for the organic antireflection layer, and setting the etching gas composition for causing a vertical removal of the photoresist at most corresponding to an etching rate of the organic antireflection layer.

Claim 8 (amended). The process according to claim 1, which comprises setting the following process parameters for the reactive ion etching of the organic antireflection layer:

pressure of the etching gases in a range between 2.67 and 26.67 Pa; and

flow of the etching gases in a range between $0.17\ 10^{-6}$ and $1.67 \cdot 10^{-6} \text{ m}^3 \text{ sec}^{-1}$.

Claim 9 (amended). The process according to claim 8, which comprises exposing an etching object to a magnetic field strength from above 0 to 120 Gauss and processing the object with magnetic field-assisted reactive ion etching.

Claim 10 (amended). The process according to claim 1, which comprises etching the organic antireflection layer with a plasma from a source selected from the group consisting of an electron cyclone resonance plasma source, an inductively coupled plasma, and a Helicon source.